

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A substrate covered at least partially with a layered coating, said layered coating comprising:

an intermediate coating and a hard carbon coating,

said intermediate coating comprising:

- a first metal layer deposited on the substrate, said first metal layer consisting of Ti comprising at least one element of group IVB, group VB or group VIB;
- a nitride layer deposited on said first metal layer, said nitride layer consisting of TiN comprising at least one nitride of an element of group IVB, group VB or group VIB;
- a second metal layer deposited on said nitride layer, said second metal layer consisting of Ti comprising at least one element of group IVB, group VB or group VIB;
- a transition layer deposited on said second metal layer, said transition layer consisting of  $Ti_xC_y$  at least one carbide of an element of group IVB, group VB or group VIB,

wherein said hard carbon coating comprises a diamond-like nanocomposite (DLN) coating[[],]

~~wherein said hard carbon coating is deposited directly onto the transition layer.~~

2. (Cancelled)

3. (Cancelled)

4. (Previously Presented) A substrate according to claim 1, wherein said hard carbon coating comprises a layered structure of diamond-like carbon (DLC) and diamond-like nanocomposite (DLN) coatings.

5. (Previously Presented) A substrate according to claim 1, wherein said hard carbon coating is doped with a transition metal and/or with an inert gas.
6. (Cancelled)
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)
10. (Previously Presented) A substrate according to claim 1, wherein said first metal layer and said second metal layer have a thickness between 0.001 and 1  $\mu\text{m}$ .
11. (Previously Presented) A substrate according to claim 1, wherein said nitride layer has a thickness between 0 and 5  $\mu\text{m}$ .
12. (Previously Presented) A substrate according to claim 1, wherein said transition layer has a thickness between 0.001 and 1  $\mu\text{m}$ .
13. (Previously Presented) A substrate according to claim 1, wherein the adhesion of said layered coating expressed by means of the Rockwell C test is better than HF2.
14. (Previously Presented) A substrate according to claim 1, wherein the adhesion of said layered coating expressed by means of the critical load to obtain delamination is higher than 35 N.
15. (Previously Presented) A substrate according to claim 1, wherein said layered coating has a hardness of at least 10 GPa.

16. (Previously Presented) A substrate according to claim 1, wherein the diamond-like nanocomposite coating comprises interpenetrating networks of a-C:H and a-Si:O.

17. (Currently Amended) A substrate covered at least partially with a layered coating, said layered coating comprising: according to claim 16,

an intermediate coating and a hard carbon coating,

said intermediate coating comprising:

- a first metal layer deposited on the substrate, said first metal layer comprising at least one element of group IVB, group VB or group VIB;
- a nitride layer deposited on said first metal layer, said nitride layer comprising at least one nitride of an element of group IVB, group VB or group VIB;
- a second metal layer deposited on said nitride layer, said second metal layer comprising at least one element of group IVB, group VB or group VIB;
- a transition layer deposited on said second metal layer, said transition layer consisting of at least one carbide of an element of group IVB, group VB or group VIB,

wherein said hard carbon coating comprises a diamond-like nanocomposite (DLN) coating,

wherein said hard carbon coating is deposited directly onto the transition layer,

wherein the diamond-like nanocomposite coating comprises 30-70 at% C, 20-40 at% H, 5-15 at% Si, and 5-15 at% O.

18. (Previously Presented) A substrate according to claim 1, wherein the DLN coating comprises an inert gas in an amount of 0.5 to 5 at%.

19. (Previously Presented) A substrate according to claim 18, wherein the inert gas is Ne, Ar, or Kr.

20. (New) A substrate according to claim 1, wherein said hard carbon coating is deposited directly onto the transition layer.